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Remarks

Claims 1 to 20 remain in this application.

Reconsideration of the Final Rejection of claims 1,4,5,8,10,15-17 and 20 as being clearly anticipated by Acker is requested.

Acknowledgement is made of the telephone interview on November 2, 2006 with Examiner Bushey. Acknowledgement is also made of the Interview Summary dated November 9, 2006 which summarizes the discussion had during the telephone interview.

As noted by the Examiner, the Fig. 7 embodiment of Acker does not illustrate the spacers 26 that appear in the embodiments of Figs. 2 to 6. Applicant's position is that the Fig. 7 embodiment of Acker should be shown with spacers 26, for example, as indicated at the right-hand side in the attached sketch. As shown in the attached sketch, (1) the presence of the spacers 26 would prevent dripping of water from the bottom edge of the depending triangular portion of the porous plastic material 52 and (2) the absence of the spacers 26 would allow water to drip from the bottom edge of the depending triangular portions of the porous plastic material 52.

It is respectfully submitted that there is a draftsman's error in Fig. 7 in view of the omission of the spacers 26.

A review of the teachings of Acker show that the purpose of the several embodiments of the header assemblies described is to drip water onto plates. For example, Acker states the following:

> "Many state-of-the-art, plate-type, evaporative heat exchangers incorporate very thin aluminum sheets as the plate material. These plates are attached alternately along opposite edges to form a cross-flow heat exchanger. Most

> of these heat exchangers have a wicking material or a wetable material laminated to one surface of the plate. These material surfaces of the plates define the evaporative cooling channels" (column 1, lines 7 to 16)
>
> "The present invention provides significant improvements and advantages over prior art header assemblies for plate-type evaporative heat exchangers, particularly, with its inherent characteristics to provide substantially even spacing between the plates defining the evaporative cooling channels, to distribute water in a substantially uniform manner **onto the evaporative cooling surfaces** without humidification of the secondary air before it enters the evaporative cooling channels and to filter impurities and debris from the recirculated water." (column 1, lines 52 to 62.) (emphasis added)

Acker further specifically teaches:

> "The header assembly comprises a plurality of substantially V-shaped, slotted troughs disposed in a substantially parallel relationship and interconnected perpendicularly to an manifold" (column 1, lines 63-66.)
>
> "Each trough comprises two substantially parallel, rigid sidewalls, two rigid end plates and **two oblique walls which converge and attach to define an apex of a V-shaped trough**. A plurality of alternating spacing elements and slots extends longitudinally along the length of the trough and equidistantly and obliquely along vertical deep walls **at the apex of the trough"** (column 2, lines 3 to 9) (emphasis added)

There can be no question that the embodiments of Figs. 2 and 6 illustrate V-shaped spacing elements 26 separated by slots' 28. The embodiment of Fig. 7 is described as follows:

> "The alternative embodiment of Fig. 7 comprises the **identical** sidewalls and oblique wall of the present invention. However, instead of using a fiberglass –woven cord 34 or a grate 50, a porous plastic material 52 is used. . . . The porous plastic material 52 is formed in a V-shape to lay in contact with the oblique walls of the trough and within the

> upper portion of the V-shape channel of the trough. Slots are formed into the porous material 52 **to provide uniform spacing between the attached edges of the plates forming the evaporative cooling channels.** Due to the porosity in the porous plastic material 52, the flow of water is inhibited to substantially distribute evenly throughout the trough 14 above the porous material 52 and the water can flow through the porous spacing elements and **into the evaporative cooling channels.** (column 4, lines 3 to 20) (emphasis added)

Note also that claim 1 of Acker requires at least one V-shaped trough being formed with a plurality of alternating spacing element and slots. Thus, claim 1 is readable on the embodiments illustrated in each of Figs. 2 and 6, but is not readable on the embodiment of Fig. 7 as illustrated unless, of course, the embodiment of Fig. 7 does have spacers 26 as in each of the embodiments of Fig. 2 and 6.

As illustrated in Fig. 4 of Acker, each slot 28 of the trough 14 receives a clamp 36 which retains two edges 38 of two plates 40 forming **evaporative cooling channels.** During operation, water is substantially equally distributed at each slot 28 onto the evaporative cooling surfaces of each plate without humidifying the secondary air. (column 3, lines 47 to 53). Fig. 5 illustrates an embodiment in which notches 48 are formed into the spacing elements to facilitate the flow of water from the trough 14 and into the evaporative cooling channels. (column 3, lines 56 to 60).

Clearly, the embodiment of Fig. 7 has plates 40 that form evaporative cooling channels as in Fig. 4. As can be seen by analogy in Fig. 4, if water were to drip from the apex of the depending spacer elements 26, the drips would not fall onto the plates 40 but would fall under gravity into the spaces between the plates 40. This is contrary to the teachings of Acker that requires the water to drip onto the plates 40.

If the embodiment of Fig. 7 of Acker does not employ spacing elements 26, the drips of water from the material 52 would drip into and through the spaces between the plates 40 as indicated in the attached sketch and not onto the plates 40.

In summary, the disclosure in Acker clearly teaches that the embodiment of Fig. 7 would include the spacer elements 26 as otherwise, the embodiment would be inoperable for the purposes intended, i.e. to drip water onto the plates 40 that form the evaporative cooling channels. Note that these channels are to convey air in heat exchange relation with the water on the evaporative cooling surfaces of the plates 40.

In view of the above, a rejection of claims 1, 2, 4 to 8, 10, 13, 15 to 18 and 20 as being anticipated or as being unpatentable over Acker is not warranted pursuant to the provisions of 35 USC 102 and 103.

The application is believed to be in obvious condition for allowance and such is respectfully requested.

Respectfully submitted,

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